

Denali Commission Award Number 01470-00 Study on Unregulated Drinking Water Sources

Semi Annual Report Period 7/1/2016 - 12/31/2016

Project Status

This project is a collaboration between the Alaska Native Tribal Health Consortium's (ANTHC) National Tribal Water Center (NTWC) and the Center for Disease Control's (CDC) Health Studies Branch. The primary goal of this project is to develop and organize data, information, and knowledge about the current regulatory status, conditions, and use of unregulated water sources on Tribal lands in Alaska and across the United States. This project is on budget, and on schedule. Unregulated drinking water survey manuscript and community outreach toolkit is funded by this grant is currently on schedule with a draft manuscript currently being reviewed and the toolkit on schedule to be piloted this Summer 2017.

Project Accomplishments

Draft Manuscript Complete

A draft manuscript for publication of the Project Coyote Water: An Assessment of Unregulated Water Sources on Tribal Lands Within the United States was completed. A total of 44 representatives from the 12 Indian Health Service (IHS) areas completed the survey, with 26 tribal organizations and 18 IHS providers participating including Alaska Villages and a Tribal Utility Collaborative representatives have participated in the project. While 95% of all participants reported some use of unregulated water for drinking and/or household activities in their area, Bemidji (27%), Oklahoma (27%), and Nashville (18%) areas had the largest proportions of respondents who reported more than half of the households in their area used unregulated water sources.. To date seven of the nine IHS Area Offices either participated or have recommended district offices to participate on their behalf (example IHS Nashville Area office recommended NY, ME, and FL IHS District Offices to participate on their behalf).

It is the goal of the NTWC to submit the manuscript for publication in the Spring FY 2017.

Project Coyote Water Presentations

The results from the unregulated drinking water assessment were presented at the University of North Carolina Chapel Hill Water and Health Conference, the Alaska Tribal Conference on Environmental Management, and Alaska Environmental Health Association Annual Conference.

Community Outreach Toolkit

The community outreach toolkit is currently being drafted. The toolkit title is "Water is Life". The toolkit is a collaborative health promotion campaign that uses art, culture, and media to create teachable moments that translate into positive community wide behavior change towards our most sacred resource – water.

Initial steps are currently being taken to pilot the toolkit in a community this Summer FY 2017.



Strategic Plan

The Strategic Plan plan for addressing Tribal concerns identified in Project Coyote Water is currently being expanded from the outline format.

A complete draft of the Strategic Plan is scheduled to be completed the Spring of FY 2017.

Project Problems

There have been no substantial problems. The Strategic Plan was delayed internally until the NTWC Steering committee could approve the outline format. The format has been approved and the plan is moving forward.



We strive to protect our water culture, preserve our resources, and prepare for future generations.

Spokane Tribe of Indians/National Tribal Water Center/Center for Disease Control Health Studies Branch 11/02/2016 (9:00 am AK/10:00 am WA/1:00 pm GA)

Invited: Brian Crossley (Spokane Tribe), James Temte (ANTHC/NTWC), Bailey Gamble (ANTHC/NTWC), Ethel Taylor (CDC/ONDIEH/NCEH), Gamola Fortenberry (CDC/ONDIEH/NCEH), Angela Salazar (CDC/ONDIEH/NCEH), Amy Kasper (CDC/ONDIEH/NCEH), and Adrianne Holmes (CDC/ONDIEH/NCEH)

- 1. Introductions
- 2. Project Updates:
 - Draft work plan & timeline
 - List of households to be sampled
- 3. Upcoming deliverables:
 - Sampling strategy
- 4. Discuss potential areas for NTWC support
- 5. Other?
- 6. Next call: December 7, 2016



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Spokane Tribe of Indians/National Tribal Water Center/Center for Disease Control Health Studies Branch 11/02/2016 (9:00 am AK/10:00 am WA/1:00 pm GA)

Confirmed Present: Brian Crossley (Spokane Tribe), James Temte (ANTHC/NTWC), Bailey Gamble (ANTHC/NTWC), Stacy Deacon (ANTHC/NTWC) Ethel Taylor (CDC/ONDIEH/NCEH), and Adrianne Holmes (CDC/ONDIEH/NCEH)

1. Introductions

- 2. Project Updates: Brian Crossley shared a comprehensive list of houses to be sampled in his Sampling Plan Matrix. He walked all conference call attendees through each column in the matrix giving further explanation on how to read the information and the motivation behind the approach to each of the different samples. He shared new information on radium sampling; the fact that there are two different radium samples (226 and 228). (Brian and the NTWC have done further research on the best approach to radium testing based on this information and are making some adjustments to the sampling strategy accordingly).
- 3. Upcoming deliverables: The next deliverable due is the Sampling Plan Strategy. NTWC will summarize all of the information relating to the Sampling Plan Matrix shared by Brian Crossley who will use this as a starting point for the Sampling Plan Strategy. The information included in the sampling strategy will cover the draft work plan and timeline information, so should satisfy both deliverables.
- 4. Discuss potential areas for NTWC support: The NTWC has identified three potential areas of support; support in writing and producing deliverable documents, informal research and the creation of educational outreach materials. Per Brian's suggestion, NTWC offered to create an informational ad for the local newsletter and a handout for homeowners explaining the project and the motivation behind it.
- **5. Other:** CDC reported that the data management plan for the project had been approved.
- 6. Next call: December 7, 2016



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Spokane Tribe of Indians/National Tribal Water Center/Center for Disease Control Health Studies Branch 12/14/2016 (9:00 am AK/10:00 am WA/1:00 pm GA)

Invited: Brian Crossley (Spokane Tribe), James Temte (ANTHC/NTWC), Bailey Gamble (ANTHC/NTWC), Ethel Taylor (CDC/ONDIEH/NCEH), Gamola Fortenberry (CDC/ONDIEH/NCEH), Angela Salazar (CDC/ONDIEH/NCEH), Amy Kasper (CDC/ONDIEH/NCEH), and Adrianne Holmes (CDC/ONDIEH/NCEH)

- 1. Introductions
- 2. Project Updates:
 - Deliverable: Sampling Strategy
 - Sampling activity update
- 3. Next deliverable:
 - Six month progress report, due March 26, 2017
- 4. NTWC Support
 - Informational brochure
- 5. Other?
- 6. Next call: January 6, 2017



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Invited: Brian Crossley (Spokane Tribe), James Temte (ANTHC/NTWC), Bailey Gamble (ANTHC/NTWC), Ethel Taylor (CDC/ONDIEH/NCEH), Gamola Fortenberry (CDC/ONDIEH/NCEH), Angela Salazar (CDC/ONDIEH/NCEH), Amy Kasper (CDC/ONDIEH/NCEH), and Adrianne Holmes (CDC/ONDIEH/NCEH)

- 1. Introductions
- 2. Project Updates:
 - Deliverable Sampling Strategy: Brian shared the sampling strategy document with the group, providing information on the project background, sampling approach and motivation behind the approach. A couple of new points arose during discussion of this deliverable:
 - i. Further clarification of how wells were selected for VOC, SOC and IOC testing These tests are being conducted to provide a broad geographical and geological understanding in contaminant trends across the reservation. Wells are selected to ensure that all regions are represented. There was a focus on wells located along the river. Chosen wells were given a girth around community wells were sample data was already available.
 - ii. Potential high season for contaminant levels the group discussed the fact that literature suggest that contaminant levels may be at their highest during the summer, so that is would make sense to gather first time gross alpha samples as near to summer as possible given staff availability in order to catch concentrations at their highest.
 - iii. The quantity of radon samples was reduced to include only homes with detectible uranium concentrations or gross alpha activity. This allows for flexibility to add additional radium samples based upon gross alpha results.



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- iv. NTWC offered to incorporate the comments from the phone conference into the sampling strategy to produce an "official" version of this deliverable to submit.
- Sampling activity update: Brian updated the group on the past month's sampling progress conducted by himself and his colleagues including approximately 20 radon samples, 4 follow up uranium and gross alpha samples, 2 radium 226 samples and 15 first time gross alpha samples.

3. Next deliverable:

• Six month progress report, due March 26, 2017 – just put this on the radar.

4. NTWC Support

- Informational brochure NTWC has created an informational brochure to be distributed to residents on the Spokane Indian Reservation as Brian and his staff visit homes for sampling. The brochure is currently in the process of acquiring CDC approval.
- 5. Other?
- 6. Next call: January 4, 2017